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Storms – Sewer line breaks, overflows, pollute beaches – The recent storms in Southern California caused failures and overflows in sanitary sewer systems that resulted in waterway contamination and beach closures. Over 6 millions gallons of sewage were released from broken or overfilled sewer lines during the storms and a reported 70 beaches were closed. Approximately ½ MG of sewage spilled from a manhole into Lake Elsinore and an additional 4 MG of sewage spilled into a state water project reservoir in the San Bernardino Mountains. One likely cause of these spills was poorly maintained sanitary sewer lines which are vulnerable to failure and are a common source of sewage releases. In addition, some sanitary sewer lines are designed to overflow when flows reach a certain level. These releases are known as sanitary sewer overflows (SSO) and often result in sewage entering storm drains. The State Water Board has just announced an effort to develop a consistent statewide approach for reducing SSOs: http://www.swrcb.ca.gov/sso/index.html Various articles on the overflows are posted: http://www.presstelegram.com/Stories/0,1413,204~21474~2650091.00.html http://www.dailybreeze.com/news/regstate/articles/1345746.html; http://www.latimes.com/news/local/la-me-sewage12jan12,1,6841029.story?coll=la-headlines-california&ctrack=1&cset=true (requires registration)

Storm runoff carried large amounts of debris into rivers and much of this debris was eventually deposited onto beaches. Some areas reported piles of debris twelve-feet high. On one day, 10 tons of trash were trapped by a debris boom across the LA River in Long Beach. Additionally, the storms caused a reduction in treatment levels at sewage treatment plants. During larger storms, many sewage treatment plants routinely bypass the secondary treatment units and "blend" the primary effluent with the secondary effluent. The legality of this practice is unclear and the U.S. EPA is expected to release regulations in February to address this issue.

The weather models used to predict the impacts of global warming have indicated that the results could include increased weather variability. There has been speculation that the unusual weather experienced in California and elsewhere may be related to global warming.

ECOTOX, AQUATOX – *EPA programs provide pollutant data, models* – Need to find out the concentration at which selenium is toxic to fish? Visit U.S. EPA's ECOTOX database to get a list of the available research results. The site provides search capability for many toxic chemicals, plant and animal species (or groups such as "fish") and aquatic or terrestrial environments. (*Note*: In order for the site to work, you need to turn off your browser's popup blocker program, if you have one). http://www.epa.gov/ecotox/

The EPA site should not be confused with the California OEHHA's *Ecotox GIS*, which is part of the *California Digital Conservation Atlas*. (http://www.oehha.ca.gov/ecotox.html) The California site provides layered map views of the state's natural resources. http://www.legacy.ca.gov/new_atlas.epl

Yet another similar-sounding site provides EPA's *AQUATOX* software. This recently updated model simulates aquatic systems and can be used to predict the fate of various pollutants and their effects on ecosystems. It is sometimes used in TMDL preparation. Posted: http://www.epa.gov/waterscience/models/aquatox/new.html

WQ NewsFlash is a weekly update of storm water and related news for the Department. *Verify information before taking action on these bulletins*. Contact Betty Sanchez, <u>Betty Sanchez@dot.ca.gov</u> (916) 653-2115, or Fred Krieger, (510) 843-7889, <u>fkrieger@msn.com</u> with questions or to be added or deleted from email list. Posted online at: http://www.dot.ca.gov/hq/env/stormwater/publicat/newsflash/index.htm